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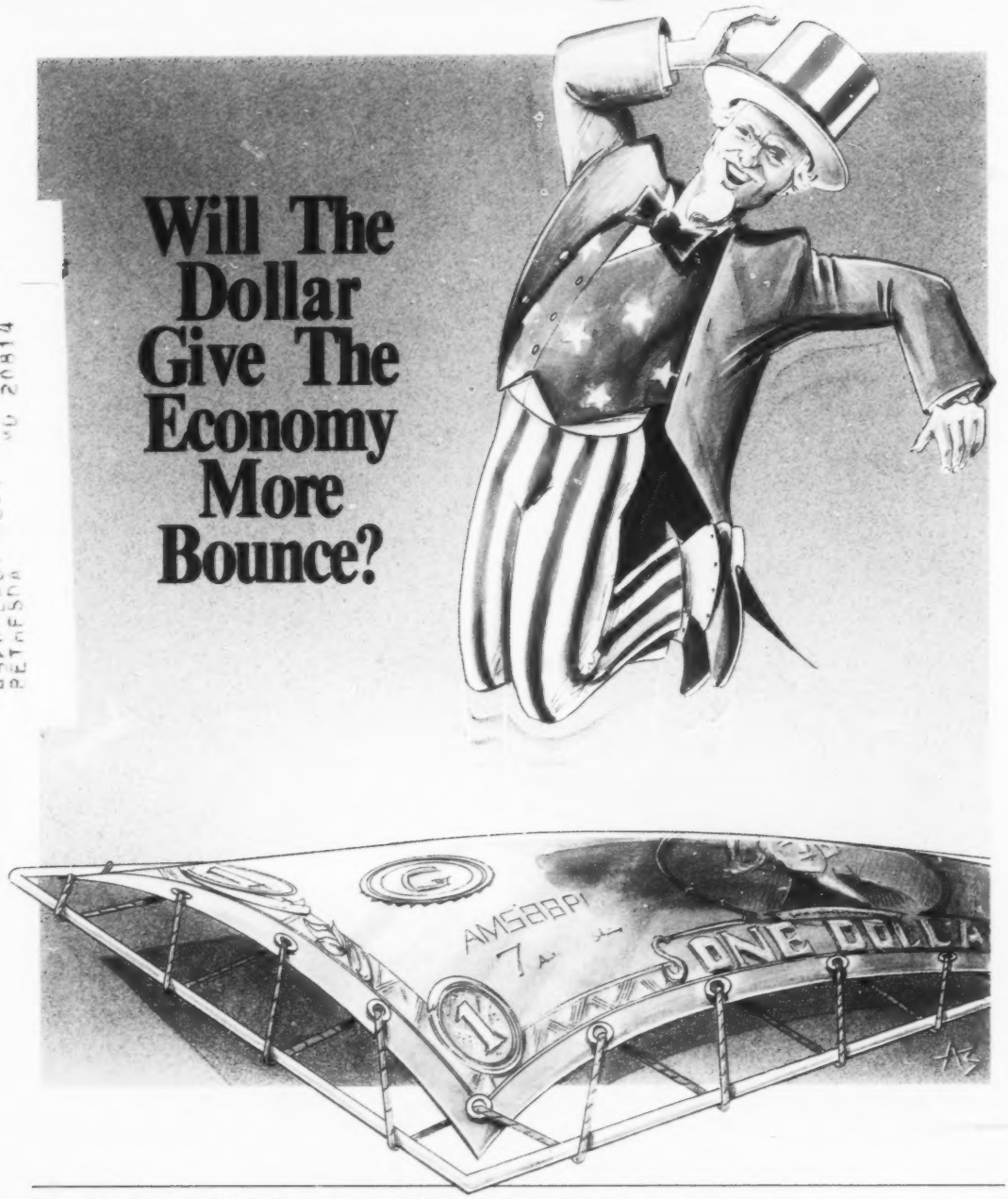
Will The Dollar Give The Economy More Bounce?



Exclusive—NAPM International Conference coverage

Seven tips for fax buyers

Value analysis—cost reduction's final frontier

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PurchasingWorld

Dumping charges may be filed against Japanese valve makers

U.S. valve manufacturers have charged that the Japanese are dumping stainless-steel gate, globe and check valves in the U. S. market. Dr. Malcolm E. O'Hagain, president of the Valve Manufacturers Association of America (VMA) says, "We have developed data showing significant margins of Japanese dumping, giving them an unfair advantage in domestic markets. We are gathering additional data to determine whether to pursue an antidumping case, and the Commerce Department has been provided with information for their review."

If charges of dumping are filed with the International Trade Commission, and if they are proven out, imports of valves from Japan could be subject to additional duties for collection by the Customs Bureau. U.S. valve manufacturers claim that the Japanese have been dumping their products in the U.S. market with dumping margins of as much as 100%.

IC sources revealed in IC D.A.T.A. Digest™

Looking for multiple manufacturer sources of digital, linear, interface, microprocessor, and memory ICs, and hi-rel/military electronic components? That data plus replacement information, alternate sources, technical specs, and discontinued devices, is included in the recently reformatted IC Digest series from D.A.T.A. Business Publishing™.

The logical information path in this redesigned IC reference source series leads the purchasing practitioner easily from one section to another of the various digests. Magnetic tape and printed versions are available. **Circle 264**

Book offers guide to understanding brokers

How to reap savings in transportation dollars, with lower rates for shippers, and cutting deadhead miles for carriers, is outlined in the *Guide to Understanding Brokering* published by the Carrier Information Exchange. The publication is designed for both shippers and carriers who seek greater transportation efficiencies through the use of third parties.

The guide describes the bid-ask world that brokers create, the best ways to qualify and work with a broker, tips on how to maximize savings thru negotiation, recourse on claims, and how to prosecute a bad broker. It is sold for $39.95. **Circle 265**

How to eliminate that pain in the back

Stress-relieving items for office use, specifically designed to reduce worker fatigue and absenteeism associated with stress and strain, are featured in the WorkRite Products catalog from BackSaver Products Co. These products consist of an adjustable footrest, desktop slope, and posture-correcting seat cushion.

The BackSaver Footmate adjustable footrest can easily fit under a desk or work station. The footrest flexes with ankle movements to relax back muscles. The desktop slope reduces back stress which occurs when one constantly bends over a desk.

A 30-day money back guarantee applies to all items from the catalog. **Circle 266**

Add another MRO source to your list of specialist firms

Industrial fuses, and only industrial fuses, are stocked by ActionFuse, an electrical distributor specializing in domestic and hard-to-find foreign types. The company also offers technical guidance for specific applications.

The firm stocks more than 1,000 different types of fuses from the most widely accepted manufacturers. They can process orders on the day of receipt and express shipments are available in emergency situations. **Circle 262**

Holiday greeting card catalog is offered

Though the Holidays are still many days away it's time to start ordering greeting cards for business use. V.W. Eimicke Associates, Inc., is offering a special expanded collection featuring a distinctive range of designs, from reproductions of American scenes by Currier & Ives to whimsical Santas.

All are reproduced with quality papers, inks, silver and gold-leaf embossing. Cards may be imprinted with a company name. For a free catalog **Circle 263**

Contract electronic manufacturing services

Full service contract manufacturing including conceptual product development, design and engineering, material sourcing, manufacturing, assembly, testing and quality controls, are available from Kimball Electronics. A free brochure describes the firm's capabilities, which include: printed circuit boards; printed circuit assemblies; metal

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Lid on prices still holding firmly

Things don't look bad on the price front—despite expectations of continuing business gains into 1989.

Prices are moving up faster than in 1986 and 1987, but the rate is still moderate—except for a few shortage-plagued basic raw materials.

Most observers remain relatively optimistic about containing further advances. The evidence here culled from *PurchasingWorld* magazine's midyear economic outlook report is fairly conclusive.

PurchasingWorld readers put their projected overall 1988 procurement cost increases at 5%. The NAPM Business Survey Committee estimate is only a bit higher at 5.8%. As pointed out in the story on page, much of this NAPM predicted increase may already have taken place. Another encouraging NAPM finding: Increases are expected to be selective and modest.

PurchasingWorld's economic consultant Dr. Roger Williams is betting on a slightly higher 6% increase this year. But this is counterbalanced by the 4% increase in industrial producer prices being projected by the Wharton and DRI econometric models.

Suppliers are forecasting only a 4.1% overall advance in the prices of the goods they sell. That's not to say that everything is coming up roses. The weaker dollar has been boosting import prices.

The upward adjustments in overall price forecasts have been rather moderate—nothing that would suggest a runaway spiral.

Some concern has also been voiced about supply-demand pressure on prices—as operating rates rise. In cases where utilization has moved into the 90% range (as in some key raw material areas) prices have moved up smartly.

But sky-high levels are more the exception than the rule. The current overall factory operating rate is still a few percentage points under the 85% level that traditionally signals a sellers' market.

Talk about rising labor costs should also be taken with a grain of salt. Point to remember: There has been little acceleration in wage increase levels. This is in sharp contrast to previous periods of relatively low unemployment when pay rates moved up sharply.

Why the difference this time around? Much can be traced to reduced worker bargaining clout. Both the Teamsters and automotive unions have recently inked pacts that actually call for lower wage raises than they received in 1985 when their last contracts were negotiated.

And don't underestimate today's still-strong competition which persists despite closer supply-demand balance. Even with reduced availability, auto companies and other large buyers are able to limit vendor increases in steel and other key areas.

Energy news is good

There's more good news on the energy front. Prices for most products this year will generally average below 1987 levels (see chart).

The good news is all based on the assumption that OPEC will still be unable to get its act together. Result: Imported crude oil, the prime energy price determinant, will creep up to $18/barrel by late 1988.

Here's a more detailed product-by-product rundown:

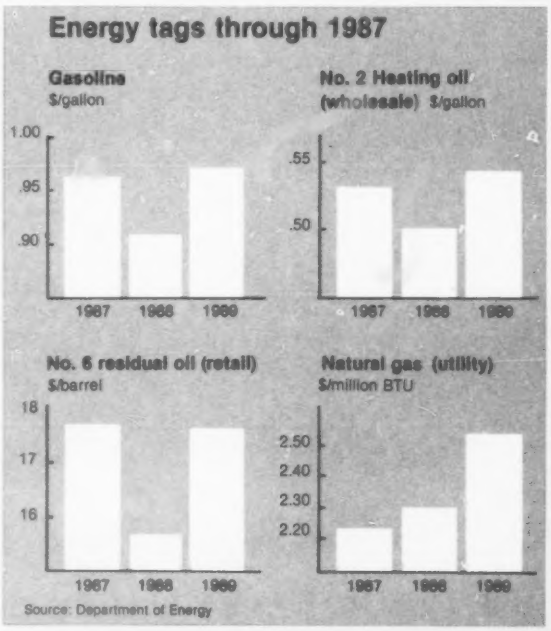
Gasoline: The all-grade average this summer should hover in the 90¢/gallon range. But the trend will be up after that, with tags approaching the $1/gallon level during the summer of 1989.

Heating oil: A drop to 48¢/gallon (wholesale) is expected this summer as demand slackens seasonally. Subsequent advances should be moderate, with 55¢/gallon expected to be the highpoint during next winter's heating season.

Residual fuel: A modest increase in retail price (all grades) is anticipated from the $14.70/barrel low of early 1988. By winter, averages could be near $18/barrel. Little change is seen after that except for normal seasonal variations.

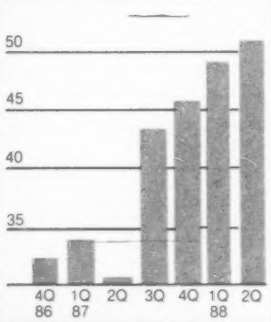
Natural gas: After falling 4.7% in 1987, residential quotes should rise 2.0% this year and by another 4.9% in 1989. Electric utilities prices (off 32% in 1986 and another 4.4% last year) should rise 2.7% in 1988 and nearly 10% in 1989.

Electricity: Residential rates will fall fractionally (0.3%) this year—as fossil fuel costs (notably coal and oil) decline. In 1989 these costs, especially for natural gas, should rise, making for a 3% overall rate of advance.



Polypropylene

(¢/lb homopolymer transaction price)



Polypropylene capacity coming on line

Another few cents is being added to the going price—with the homopolymer grade now selling for well over 50¢/lb. On the other hand, supplies should soon begin to increase, suggesting that future advances will be somewhat harder to come by. There are already reports of competitive jockeying in anticipation of new second half 1988 capacity increases by Advanced Global Polymers, Aristech, Exxon, Fina, Himont and Quantum. And next year Eastman, Exxon, Himont and Soltex will add still more to the supply. All in all, more than 20% additional potential should be coming on-stream over the 1988-89 period.

Moderate steel increases

Price increases remain surprisingly moderate—despite strong demand, relatively high operating rates and extended delivery times. Wharton Econometrics puts the second quarter composite price (transaction basis) at around $516/ton, up only 3% compared to the previous three-month period. More important, increases over the rest of the year are expected to be even less bothersome—with averages moving up just about 1% over this period. One reason: Demand should begin to fall off as second half shipments drop to 37.5 million tons compared to the 42 million shipped during the first six months.

Paper advances are about over

Recycled boxboard tags have just moved up 6-8%. But for the second half of the year, little further advance is seen for major grades as the industry digests first half increases which for the most part have averaged in the 7-8% range. The two exceptions: 1) market pulp, which could rise slightly in the third quarter, and 2) corrugated cartons, which will continue to edge up toward the $410/ton linerboard equivalent.

Aluminum prices don't slow demand

Current aluminum demand remains brisk—despite continuing price advances. On the latter score, market ingot is now commanding upwards of $1.30/lb, with most fabricated items also being adjusted upward . Mill prices for Series 3000 and 5000 common alloy sheet and coil, for example, have jumped 40-50¢/lb over the past year. As for demand, one U.S. producer puts the

Ever so slowly, copper prices should fall below $1/lb

CURRENT SITUATION: Prices are holding up well despite the onset of the summer slowdown. Averages remain well under the $1.40/lb peak at the beginning of the year, but they're still quite high—about 30% above 1987 levels. **Scattered labor woes here and in Peru, tight supplies and the recent runup in aluminum and other metals are all contributing to current strength.**

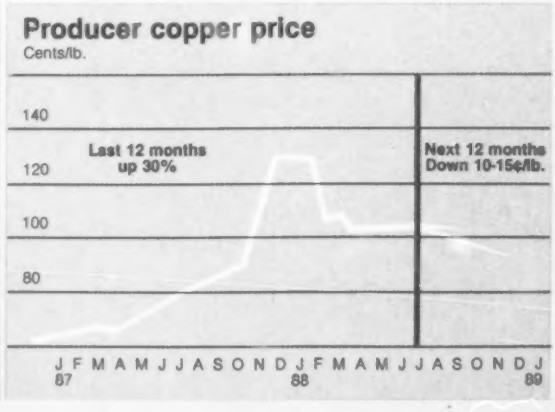
DEMAND: Near-term gains should be harder to come by, primarily because of slower housing activity. There are already signs of easing as copper and brass service center shipments tail off after peak 1Q 1988 levels. Nevertheless, the fast start this year suggests that U.S. domestic copper consumption will rack up a respectable 2% advance. Longer term, some increase in consumption for autos is possible because of more wiring for electronic components. But aluminum radiators could offset much of the gain. Annual consumption gains should lag 30% behind GNP. Implication: A 3% increase in real GNP should spur a 2% copper advance.

SUPPLY: Lingering global tightness is confirmed by stocks which still remain under the normal 5-6 week level. But free-world production is targeted to rise by 5-6% this year (to 6.8 million metric tons). Much of the growth will be in the U.S. where mine output should be up by 10% (to 1.4 million metric tons). More output is on the way from Chile where a 16-20% jump in supply is seen over the 1989-1992 period.

PRICE OUTLOOK: The improving supply projection suggests a gradual price decline. And while tags shouldn't fall through the floor, a 90-95¢/lb quote seems probable by year-end. **For 1989, tags below 80¢/lb are likely.** Costs would also seem to indicate some leeway for future price declines. One big U.S. producer's production costs were recently estimated at just 55¢/lb.

Producer copper price

Cents/lb.



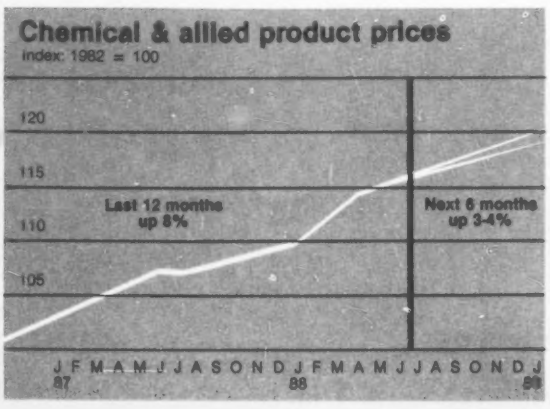
It's still a seller's market in chemicals

CURRENT SITUATION: Prices, sparked by continuing advances in industrial chemicals and plastic resins, continue to edge up. At latest report averages were running 8% ahead of 1987 levels—with modest price increases scheduled for the 3Q. **Other signs of a sellers' market: High operating rates, low stock/sales ratios, and booming demand.** Industrial production is now also 8% above the 1987 reading. Strong exports are also helping buoy the market.

DEMAND: Gains should continue at a lower rate than the first half. Output for 1988 should be up 5-6%. But there could be some sector-by-sector variation. **Eight percent gains are seen for organic chemicals and plastic resins.** And a double-digit advance is possible for agricultural chemicals. Basic chemicals (chlor-alkalis, industrial gases, pigments, and other in organics) will advance only slightly.

SUPPLY: Scattered tightness persists—as demand in some sectors presses up against capacity restraints. Operating rates are averaging near 85%—4% above early 1987 levels—or higher. Thus many plastic resins, titanium dioxide, ethylene, and chlorine are all operating at or near capacity. But relief is on the way—the industry is expected to boost its plant and equipment spending by nearly 20% this year—enough to add 5% onto overall industry capacity in 1988 and another 2-3% in 1989.

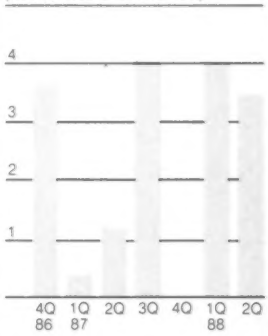
PRICE OUTLOOK: Despite just-posted hikes, the overall rate of increase should be slowing. Reasons: Decelerating demand gains, better market balance, and a gradual flattening out in petrochemical feedstock costs. **Another 3-4% add-on to industry averages can't be ruled out by early 1989.** For 1988, year-to-year increases should shape up as follows: basic inorganics (7-8%), basic organics (12-13%), plastic resins (16-20%), paint (4-5%), agricultural chemicals (10-11%), and drugs and pharmaceuticals (5%).


Chemical & allied product prices
index: 1982 = 100
120
115
110
105
Last 12 months up 8%
Next 6 months up 3-4%
J F M A M J J A S O N D J F M A M J J A S O N D J
87
88
89

year's domestic shipment total at near 16.5 billion pounds—up 2-3% and a new all-time high. But while things are fairly snug now, relief is on the way, with about 600,000 tons of new potential expected to hit the market this year alone.

Capital equipment

(% increase at annual rate)



Machinery prices inch up

Prices aren't increasing all that much—despite rising demand and a softer dollar. Latest government readings suggest that overall capital equipment tags are running less than 2% ahead of year-earlier levels. Also worth noting: 1) vendors responding to a new survey put the increase in 1988 non-electrical machinery at only a bit more than 1%, and 2) much of the recent hikes in Japanese machine tool lists are being offset by significantly higher discounts.

Zinc prices jump

The plating and alloying metal is taking off, with prices jumping up into the low 60s range—more than 40% above levels prevailing as recently as spring 1987. Behind the increase is a combination of factors including low inventories, higher-than-expected demand, Russian and Chinese buying, fears of strikes, and generally tight supplies. This latter tightness is likely to persist, too, with Free world production expected to remain unchanged in 1988 at last year's 5.22 million ton level—not nearly enough to prevent a global shortfall for the seventh straight year.

Semiconductor demand still strong

Demand is booming—with dollar totals expected to rise as much as 20-30% this year. Not surprising, sellers are calling most of the signals—especially in the memories area where 256K DRAMs have moved up as much as 50% since early 1988. And some 64K EPROMs have jumped over 30% over the same period. Also advancing are linear ICs and MOS logics which were both, at latest report, running some 5-6% ahead of 1987 averages.

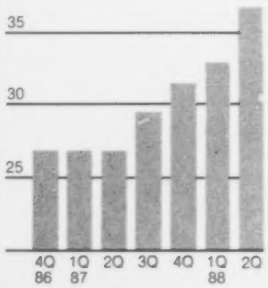
Fax machines still sizzle

The market continues to sizzle, with sales expected to jump an eye-opening 63% this year—to 950,000 units. Prices, meantime, are coming down. Compare estimated dollar and unit projections made by the Computer and Business Manufacturers Association (CBEMA), and an average price of $2,300 is indicated, some 8% under last year's level. Coming

back to the demand, a CBEMA spokesman observes, "The market is reaching critical mass. Once there's a substantial installed base of fax machines, businesses have more incentive to buy them, since they can communicate more broadly."

Phthalic anhydride

(molten)



Feedstock supply remains snug

Supplies of phthalic anhydride (for plasticizers, polyester resins and alkyd resins) are likely to remain snug through the rest of 1988. Reason: Producers are temporarily shutting down plants for badly-needed maintenance. But there should be enough to go around as export sales are curtailed. Prices, meantime, are firming, with the second increase of the year scheduled for this month.

Lead stays firm

Prices look to remain relatively firm—not even the recent demand pause made for any significant easiness, as prices remain in the high 35¢/lb-plus range. The approach of the battery-buying season could actually make for another few cents increase by late summer or early fall. On the other hand, some correction is likely by next year as more production begins to hit the market. Prices at that time are expected to remain well above the 26¢/lb low of early 1987.

Ethylene tags continue up

Tight supplies have pushed contract tabs up by more than 50% since the beginning of 1988. And compared to last summer, the advance is near 100%. Nor is the end in sight, with a cent or so expected to be added onto the price in each of the next three months, bringing the September quote up into the low-to-mid-30s range. Blame it on recent production interruptions which, in turn, have put some polyethylene customers on allocation and forced new resin boosts.

Nickel runup is over

The big 1988 runup in prices is over as supply interruptions and fears of new strikes fade. Over the past few months more than $1 has been shaved off dealer quotes—and a similar drop is likely during the summer months. Even so, don't expect tags to drop anywhere near the early-in-the-year $1.70/lb level. Reason: Despite an improving supply situation, Free world output this year will hit only 560,000 pounds.

Extra costs of offshore buying

Overseas bargains can often prove to be more illusory than real, according to a new study by Quick, Finan and Associates. The report points out that buying offshore generally entails extra costs overlooked when the contract is awarded.

The study's conclusions, based on interviews with National Tooling and Machining Association members and their suppliers, are equally applicable to the purchase of many customized component parts, according to author Perry Quick.

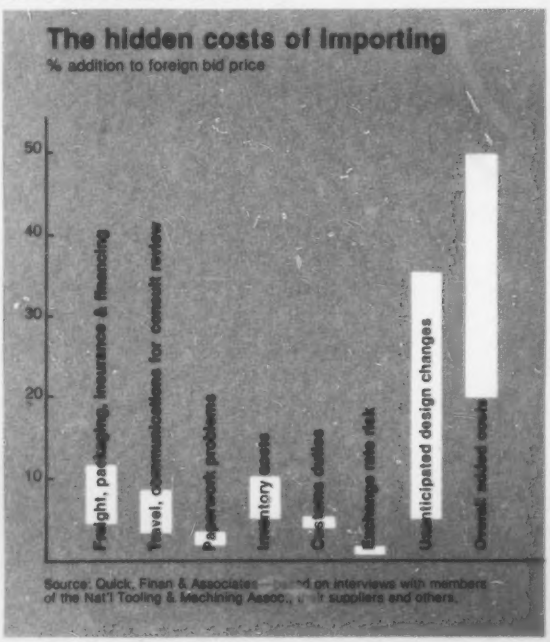
Quick adds that these are generally products where quality and delivery are of prime importance. Some of the examples he cites: Jigs and small dies for electronics manufacturers and small mechanical castings and machined parts in autos.

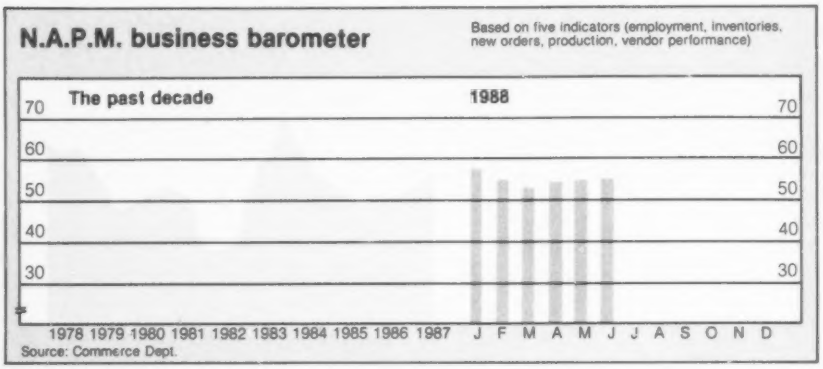
In any case, the new report estimates that extras tacked onto these kind of products frequently increase the overall cost by 30-40%—with some advances of near 50% not all that uncommon.

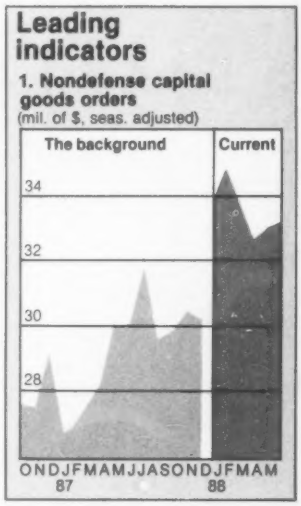
As indicated in the accompanying chart, there are several of these extras that bear close watching. For example, customs duties (when not included in the foreign price quote) generally offset 4-6 percentage points of the nominal price advantage. Packaging, freight, insurance, different financing terms, and exchange rate risk can narrow the foreign advantage by another 5-15%.

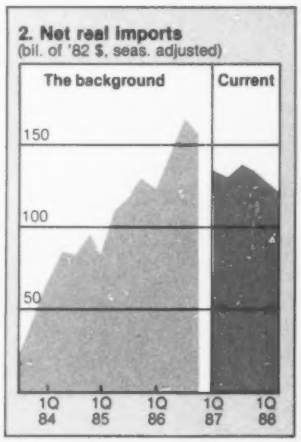
Similarly the added costs for bringing foreign products in line with U.S. standards can offset an additional 5-35% of the nominal price difference.

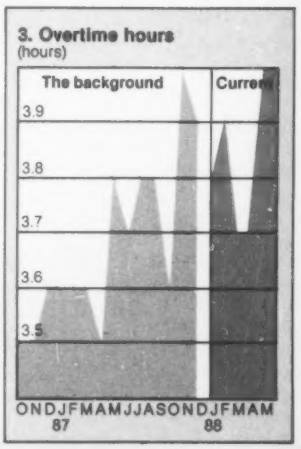
The study also finds a seeming 42% Japanese price advantage dwindling to near nothing after adding hidden costs detailed above.




N.A.P.M. business barometer
Based on five indicators (employment, inventories, new orders, production, vendor performance)
The past decade
1988
70
60
50
40
30
1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 J F M A M J J A S O N D
Source: Commerce Dept.







KEY ECONOMIC TRENDS

Exports help keep economy expanding

Moderate economic expansion into early fall now seems virtually assured as leading indicators published by Uncle Sam and the NAPM Business Survey Committee continue to signal new gains.

The NAPM yardstick (currently in at 55.1—more than 5 points above the neutral 50 mark) is right in line with year-to-date averages. And if this holds for the remainder of the year, NAPM spokesmen say it would be consistent with a 3.4% real GNP growth figure.

One factor behind this buoyancy: Renewed interest in capital goods buying. As shown in the chart on the right, non-defense orders for machinery and equipment are running about 10% above 1987 levels.

And this trend is likely to persist. The latest plant and equipment surveys point to a similar 10% increase in capital investment this year—nearly double the 6% increase projected just six months ago for 1988.

Zero in on the machine tool segment of this industry and the gains are even more impressive. In one recent month, figures for new tool orders doubled from 1987 levels. More important, there is a good stream of inquiries about additional machines.

Exports seem to be another important economic prop these days. Thus 35% of NAPM respondents say their firms are currently experiencing an increase in orders from overseas firms.

The prime mover here is the softer dollar which has helped make our goods more competitive in world markets. Big export gains are noted in paper, chemicals and machinery.

All this, in turn, is showing up in improved balance of trade figures. Note from the accompanying chart that net real imports have been slowly falling—to the point where they are now more than 25% under 1986.

This means a shift of $40 billion—enough to contribute significantly to recent GNP advances. Moreover, it's one key reason behind current robust increases in industrial production.

And more balance of trade improvement may be in the cards. One Federal Reserve official is now predicting another $50 billion shrinkage in the real trade deficit by the end of next year. This would bring the red ink figure down to $70 billion—a far cry from the recent $161 billion all-time high.

Consumers also seem to be holding up their part of the GNP spending stream. And again, the prognosis is for more of the same into the second half as consumer confidence—as measured by the Conference Board—hovers near an 18-year high.

About the only weak spot on the consumer front is housing where only 3% of queried buyers now plan on the purchase of a home over the next six months (off from the previous 3.5% reading). But all this is offset by an improvement in plans to buy cars and big-ticket appliances.

Still another important plus: The increase in overtime hours (see chart). This is a pretty strong indicator that top management is under increasing pressure to beef up output.

The high overtime rate also suggests that more new jobs may soon be created. It's not surprising that a new Dun & Bradstreet survey of 5,000 companies estimates that 2.4 million new jobs may be created this year—almost as many as the three million added in 1987, and a pretty healthy number for an expansion nearing its sixth birthday.

Fleet cars held longer and driven farther

No surprise in today's cost-conscious environment: Fleet cars are being held longer and driven more intensively. Here are the latest findings, based on a new National Association of Fleet Administrators (NAFA) survey of 185 U.S. commercial fleets involving nearly 184,000 vehicles:

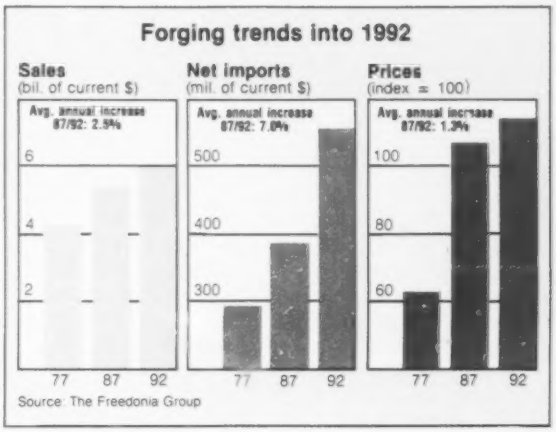
- **Car age:** The typical vehicle is being held 32 months—up a full month from a year ago and up three months from 1987 levels.
- **Mileage:** The average car is now being driven 64,356 miles before trade-in. That's up more than 3,000 miles from two years earlier and close to 8,500 miles more than the figure reported in 1984.
- **Disposal method:** Auto auctions are used most often (35% of the time) with sales to employees (27%) and wholesale disposal (20%) not too far behind. Only 9% of the NAFA respondents use new or used car dealers.
- **Selling prices:** Fleets rely most often on the Automotive Market Report when determining prices of vehicles sold to employees. Other popular options (in descending order of preference): NADA wholesale prices, company book value, leasing company adjustments, Black Book and Blue Book.

The new study also looks at public utility and U.S. government fleets. The key findings here: Those cars are used even more intensively. Typical public utility and U.S. government cars are held 75 and 60 months, respectively. And on the mileage front, figures top 85,000 miles for both types of fleets (about 32-34% above the figure noted for their commercial fleet counterparts).

Forging imports up, prices steadying

Increasing import competition and restrained price boosts lie ahead for the $5 billion U.S. forgings industry. Analysts at the Freedonia Group see net imports rising at a hefty 7% annual rate over the next few years. The Cleveland-based research firm predicts that by 1992, incoming shipments will account for 10.2% of the domestic market—up nearly 2.5% from 1987.

Price increases are expected to average 1.3% a year into the early 1990s. That's a lot better than the 5.8% annual increase recorded over the past decade. Relatively sluggish demand and import competition are probably behind this low inflation forecast.



On the demand front, Freedonia analysts project that real consumption will rise by less than 1.5% annually. Some of the factors behind this disappointing trend: 1) slow-growing or declining end-use industries, 2) downsizing of motor vehicles, and 3) competition from castings, plastics and ceramics.

Nonferrous forgings will do better than their ferrous counterparts thanks to strength in the aircraft/aerospace sector. But despite this faster growth (3.2% a year), nonferrous forgings will still comprise only 27% of the market by 1992.

The study also points out that the captive production is relatively minor (17% of domestic shipments) and thus the industry is not highly concentrated. The four largest companies—Alcoa, Ladish, GM and Wyman Gordan account for only 22% of shipments.

CURRENT PRICES

Price rise still slow

Chalk up another month of slow rise in overall industrial prices. While averages have moved up 0.5% over the past month, if you remove a 1.3% increase in energy tabs, the overall gain drops to 0.3%—close to advances of the previous few months.

The latest energy boosts were broadly based, with increases reported for home heating oil, gasoline, jet fuel, residual oil, diesel fuel, and crude petroleum. About the only weak spot was natural gas, where prices dropped considerably.

But other energy sectors may also be ready to flatten out, if OPECs problems in setting new production quotas are any indication. Best bet: Relatively unchanged tags—except for seasonal variations—through early fall.

Elsewhere, the upward pressure is most notable in chemicals and allied prod-

ucts. Organic chemicals moved up another 0.5%—bringing averages 10% above 1987 levels. Inorganics are also rising at a relatively fast clip—up 6% over the same 12-month period.

But even these pale when compared to plastic resins, where a 2% jump over the latest 30-day period has brought quotes more than 21% above a year ago. New postings suggest another advance when next month's price numbers are released.

Metals also inched up over the past month—led by aluminum, zinc and steel mill products. But the latter should begin to level off—some declines are possible in aluminum and copper as new supplies begin to come on stream.

Equipment prices have also been edging up. But discounts can still be had in such key sectors as Japanese machine tools. A new Commerce Department forecast indicates little or no change in overall plant and equipment prices for the year.

Construction material increases also seem manageable. Indeed, gypsum, wire and cable have come down a bit.

Paper, too, may have seen most of its 1988 increases. Corrugated cartons are still inching up—but most other lines are now busy digesting big first half hikes.

THIS MONTH'S BREAKDOWN

Index: 1982 = 100

	Latest level (May)	% change from: Month ago	Year ago
Bearings	113.4	0.4	2.5
Bolts, nuts, etc.	106.6	0.3	3.4
Chemicals, inorganic	99.8	0.3	6.4
Chemicals, organic	104.9	0.5	10.4
Concrete products	109.9	0.0	0.5
Corrugated cartons	110.3	2.0	NA
Cutting tools, small	107.0	0.0	0.7
Electric lamps (bulbs)	121.9	0.0	0.9
Electronic components	116.3	0.4	1.5
Fans and blowers	113.4	0.4	2.5
Foundry and forge products	109.1	0.3	3.7
Fuel oil (residual)	42.6	5.2	−21.3
Furniture, commercial	123.6	−0.1	4.4
Gasoline	59.6	4.9	1.5
Glass, flat	109.6	0.4	3.0
Glass containers	112.1	−0.2	−1.0
Gypsum products	111.3	−2.0	−14.1
Hand tools	119.8	−0.2	3.4
Hand tools, power driven	112.3	0.4	3.1
Industrial furnaces	119.3	0.4	4.2
Integrating and measuring instruments	116.2	−0.1	2.2
Internal combustion engines	110.9	0.1	1.4
Lubricating oil	104.2	0.4	5.0
Lumber millwork	121.6	0.2	3.6
Material handling equipment	107.3	0.5	3.3
Metal containers	109.9	0.2	0.3
Metal mill shapes (nonferrous)	126.7	0.8	23.9
Metal tanks	104.1	1.2	8.7
Motors and generators	120.7	0.4	5.3
Motor trucks	123.8	0.8	1.9
Office and store equipment	106.6	0.0	1.7
Paperboard	133.1	0.4	14.9
Paper boxes and shipping containers	123.3	1.2	7.9
Paper office supplies	114.6	1.9	5.9
Paint	111.1	0.1	3.1
Plastic resins	130.0	2.3	21.5
Precision measuring tools	122.2	2.5	7.6
Pumps and compressors	107.8	0.3	2.7
Refractories	113.8	0.4	3.5
Rubber belts and belting	105.2	0.4	1.3
Scales and balances	106.3	0.3	2.7
Steel products	110.4	0.8	9.2
Switchgear	112.9	0.0	2.3
Textiles, synthetic fibers	97.0	0.8	6.8
Textiles, gray fabrics	114.2	0.3	7.9
Tires and tubes	93.9	0.5	3.9
Transformers and power regulators	107.5	−0.5	0.5
Welding equipment	116.7	0.5	5.4
Wire and cable	123.2	−0.8	20.5

STEEL SCENE

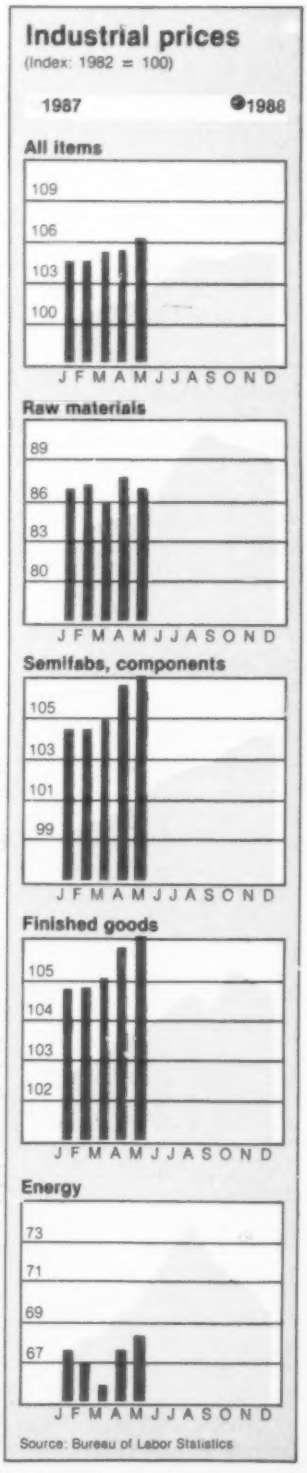
Service centers say the heat is easing

The more-than-year-long steel buying boom may be heading for a breather.

The evidence comes from those who should know best—steel service centers and purchasing managers. Both are now forecasting a decline in metal demand over the next three months.

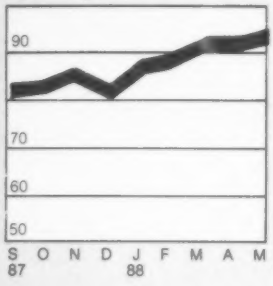
On the distributor front, 37% of those responding to the latest Steel Service Center Institute (SSCI) survey expect a drop-off in incoming orders this summer—more than twice the 15% who are still looking for continuing increases. And buyers are not that much more optimistic—27% calling for reductions *versus* 19% who anticipate a step-up in purchases.

These projections pretty much back up what mill men and steel analysts have been saying for months now—that current con-

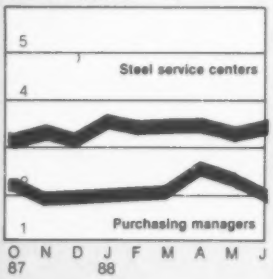


Steel

Operating rates

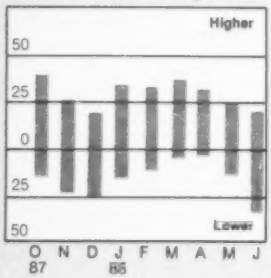


Inventories
(Months supply on hand)

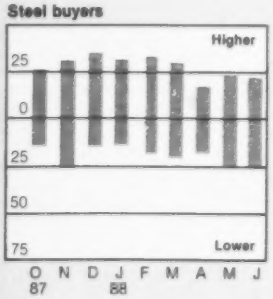


Demand
(Percent of respondents)

Service centers incoming orders



Steel buyers



Import prices
(Compared to domestic)

Steel buyers

ABOVE 52%
SAME 32%
SLIGHTLY BELOW 16%
SUBSTANTIALLY BELOW 0%

Service centers (carbon)

ABOVE 8%
SAME 92%
5-10% BELOW 0%
10-20% BELOW 0%
OVER 20% BELOW 0%

Source: Steel Service Center Institute, NAPM Steel Buyers Committee

sumption patterns are not robust enough to sustain the strong demand gains of the first six months of the year.

Taking off on this, SSCI president Andrew G. Sharkey observes that while shipping rates for carbon bars and tubing as well as stainless and alloy products are maintaining impressive levels, there are now some signs of leveling off in other sectors. Thus carbon plate and structurals have recently been flat to moderately lower.

As he sums it up, "We are currently seeing a gradual cooling off of an overheated early 1988."

Sharkey also points to rising service center inventories as a sign of an eventual flattening out. He says that his members' inventories aren't all that much out of line (with the possible exception of plate). Nevertheless, he does expect a period of modest steel stock reduction through the third quarter—to bring things back into better balance.

Confirmation that service centers mean to do something about their holdings also comes from their current perception of the situation. Specifically some 45% dub their inventories as too high *versus* only a minuscule 3% who feel further additions may be in order.

Concern about inventories is also noted by buyers. The figures here: 38% say they are aiming at an inventory decline while only 8% say they are planning on an increase.

In short, inventories as well as consumption seem to be working in favor of a fall-off in demand. If so, it means that the long list of items where buyers expect supply tightness in the months ahead—mostly in plate and sheet—may be exaggerated.

Clearly, if mill shipments drop down to an average of 18-19 million tons per quarter (*versus* 21 million in the first half), delivery patterns should begin to improve.

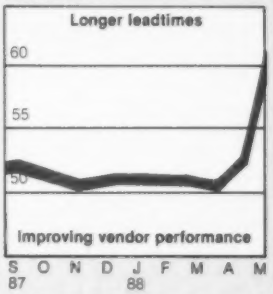
A somewhat slower demand pace also suggests that service center worries about continuing steel price increases may also be overdone. At this stage of the game the fact that 64% of queried distributors are bracing for increases of 2% or more over the next six months has to be regarded as questionable.

A scattering of service centers may be swinging around to this view. Thus 7% of distributor respondents now expect some price erosion (*versus* only 1% two months earlier). While hardly a big number, it does represent a shift in thinking that will bear closer watching in the months ahead.

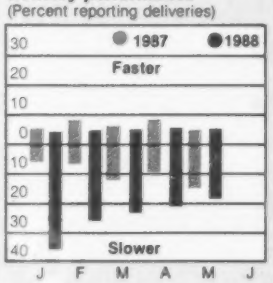
Still another sign of price restraint is the fact that the big auto firms have been able to negotiate new contracts calling for

Monthly procurement status report

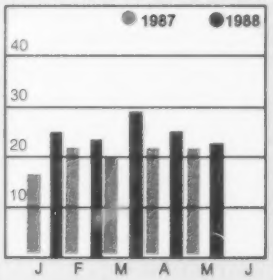
Leadtime index
A "diffusion" index based on 158 key commodities. Above "50" indicates a tendency for leadtimes to stretch out. Below "50" suggests improving vendor performance.



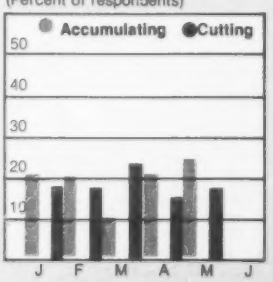
Delivery performance
(Percent reporting deliveries)



Forward commitments
(% committing 90 days or more in advance)



Inventory strategy
(Percent of respondents)



Source: NAPM

only minor increases. It's something that's not likely to be forgotten when other firms begin negotiating this fall.

PROCUREMENT STATUS

Leadtimes slowly shrinking

Leadtime problems just won't go away. At latest report more than one out of every three product categories monitored regularly for *PurchasingWorld* readers is expected to experience further stretchouts.

Upshot: The exclusive *PW* leadtime index is now clocked at a relatively high 62. That's four points above a month earlier and 12 points above the neutral 50 level.

But for the first time in over a year there are a few signs that the worst may be over. Increases in leadtimes were quite modest—running generally in the ½-1 week range. Equally significant, there are now a fair number of items where shrinking leads are noted—including a few in the crucial steel area.

The overall indication of a flattening in availability is suggested by the latest NAPM Business Survey Committee report. Fewer members are now reporting slower deliveries—19% currently, *versus* 21% a month ago and 23% two months ago.

The latest 19% reading is still more impressive than the 5% noting some speedup. But the trend still has to be regarded as hopeful. The net difference between those experiencing slower and faster deliveries (14%) is the smallest in a year.

Still another indication of possible improvement: The percentage of PMs currently committing 90 days or more in advance for production materials has been shrinking—29% two months ago, 25% one month ago, and 22% currently. Conversely, those committing 30 days or less in advance has grown significantly over the same period.

A more sobering note is sounded by the considerable number of items on the NAPM short supply list. Those currently include aluminum, copper, nickel, steel castings, printing paper, caustic soda, plastic resins, selected organic chemicals, silicon, latex disposable gloves, and electronic memory devices.

Problems in the electronics area are confirmed by the accompanying *PW* rundown which shows rising leads for cables, transformers, and linear ICs. Another leadtime survey on semiconductors indicates that deliveries have stretched an average of 2-4 weeks over the past few months.

LEADTIMES (in weeks)

	Month ago	Latest month
CHEMICALS-PLASTICS		
Adhesives	3½	3
Naphthalene	2	2
Paint	3½	3
Paint, Coil Coating	3	3
Paint, Maint.	2½	2
Polyester Resin	4	2
Polyethylene Resin	4½	4
PVC Resin	6	5½
Titanium Dioxide	1½	1½
ELECTRICAL & ELECTRONIC		
Cables	9	8½
Circuit Breakers	4	4
Electromech. Devices	7	7
ICs (Linear)	10½	8½
Motors, Fractional Horsepower	12	14
Motors 1-10 HP	12	13
Motors 10 HP & Up	11	12
Relays	7	8
Transformers	10	10
LUMBER		
Hardwood	3	2½
Plywood	3	3
Softwood	2	2
Particleboard	3	3
OFFICE PRODUCTS		
Copiers	2	2
PCs Workstations	4	4
Facsimilies	3	3
Pre-printed Form	4½	4
Elex Typewriter	3	3
Furniture	4½	4
Printers	3½	3½
Telecommunications	8	7

	Month ago	Latest month
PACKAGING		
Bags, Kraft	4½	4
Bags, Multiwall	6½	6
Cartons, Corrugated	2½	2
Cartons, Folding	2½	2
Cellophane Wrap	4	4
Plastic Bags	2½	2
Plastic Pkg.	4	4
Shrink Film	3½	3½
Drums, Fiber	2	2
Drums, Steel, Std.	3	2½
Wood Pallets	2½	3
Wirebound Boxes	4	4½
Strapping	3	2½
PAPER		
Fiberboard	4	4
Glassine	5	5
Groundwood	5½	5
Kraft	2½	2
Kraft, Bleached	3	3
Kraft, Natural MFNS	1½	1
Laminated	8	6
Tissue	5	5
NONFERROUS METALS		
Aluminum Coil	16½	15½
Aluminum Plate	21½	21
Aluminum Sheet	18	18
Brass Castings	7	8
Brass Rods	7	8½
Brass Sheet	8	8½
Brass Tube	8	8
Copper Fittings	2	2
Copper Mill Prod.	6	6
Copper Tube	4	4
Lead	4½	4
Magnesium	3	3

	Month ago	Latest month
Manganese	9	8
Nickel	3	3
Silicon	2	1
Tin	2½	2
Wire, Specialty	4½	4
Zinc	3½	3½
MISCELLANEOUS		
Bearings, Domestic	5½	5½
Bearings, Foreign	16	16
Fasteners	5½	6
Fasteners, Std.	2½	2
Insulation Mat'l.	7	7
Machined Parts	5½	5½
Pipes & Valves	4½	4
Rubber, Synthetic	2	2
Rubber Hose	3½	4
Tungsten Carbide Parts	14	14
Valves, Cast Steel	5	5
Welding Supplies	3	2½
STEEL		
Cold-Drawn Bars	4½	3½
Cold-Rolled Sheet	11½	11½
Forgings	11	11
Galvanized	3½	3
Grey Iron Castings	9	9
Hot Rolled Bars	4½	3½
Pipe, Carbon	4½	4
Plate	11½	11½
Sheet	14	14
Sheet Castings	11	7½
Structurals	10	10½
Tubing	6	6

Figures represent the average leadtimes from various locations.

A second look at 1988
It's bigger and brighter

by Robert S. Reichard, executive editor

Not only is the United States in its sixth consecutive year of economic growth, but the forecasts are now for a seventh year of growth.

And, especially important to purchasing managers, industrial growth this year is expected to exceed that of the Gross National Product.

PW's executive editor, Bob Reichard, in our special January section Forecast '88, correctly forecast that the October market crash would have only a slight dampening effect on the economy. Now, the same sources he researched to correctly call that turn are pointing to more vigorous growth throughout 1988.

The American economy in the first half of 1988 has been performing better than expected. Three basic reasons: 1) The stock market crash of last fall has had almost no discernible impact on consumer spending, 2) export demand has improved substantially, and 3) capital spending is more robust than originally anticipated.

Dr. Roger Williams, *PurchasingWorld* Magazine's economic consultant, is now projecting a 3.5% increase in real GNP this year—up a full percentage point from his beginning-of-the-year forecast. His industrial production estimate is adjusted upward by a similar amount, from 4.4% to 5.5%.

Gains, adds the St. John's University professor of economics, will continue into 1989 but at slowly decelerating rates. He feels this slowdown will be due to a combination of factors including somewhat bigger price increases, rising interest rates, and a softening in profit margins. His growth estimate for the first half of 1989 is a 3.3% annual advance rate.

Campaigning impact negligible

Dr. Williams believes that the upcoming presidential election will have little near-term impact, especially as far as the budget is concerned. Williams' reason: neither party is willing to deal seriously and realistically with this matter until after the election.

He also thinks that whichever party wins in November, tax increases appear likely in 1989. If the Democrats win, there would probably be more attention to private benefit programs mandated by the Federal government, but not involving an overall increase in Federal spending. A step along this line has already been initiated in Massachusetts by Governor Dukakis.

Fed's impact to grow

Federal Reserve policy has allowed more rapid monetary growth in 1988 than in 1987—although the Fed has also let market forces move interest rates upward in recent months. Williams expects interest rates to continue rising—and at some point the discount rate could also advance. The Fed is likely to be less generous in providing additional reserves for the banking system. And policy will be more of a restraining influence as 1988 and early 1989 develop.

Some of Dr. Williams' other comments and projections for key sectors of the economy:

- **Manufacturing:** Factory output has come into its own after a long period of the doldrums. A lower value for the dollar has helped, as have more effective internal cost controls and a sizable increase in capital goods purchases. Manufacturing production is moving ahead and manufacturing employment is beginning to follow suit.
- **Wages:** Unit labor costs have already started to accelerate and no early letup is in sight. Wage hikes have begun to pick up a bit and all signs suggest that productivity gains will not be sufficient to offset those wage increases. This year Williams looks for a 4.0% increase in manufacturing unit labor costs—a bit more than the 3.7% gain forecast six months ago and in marked contrast to the 2.1% decline in this key inflation barometer in 1987.
- **Prices:** The comprehensive GNP deflator will advance 4.5% this year (*versus* an earlier 3.5% projection). Moreover, by the first half of next year it could be approaching a 5% annual rate.

Industrial prices will be advancing more rapidly than before, reflecting

significant economic growth and increasing pressure on plant and labor capacity. This higher price inflation is likely to continue into 1989. Williams new projections here: A 6% increase this year and 7% annual rate of increase during the first half of 1989.

■ **Availability:** The tightening of supplies has come earlier and more sizably than anticipated. The factory operating rate is already above the 83% average projected for 1988. Purchasing managers are thus increasingly faced with slower deliveries.

Sizable increases in plant and equipment spending now shaping up for 1988 will help in the long run. But over the shorter pull this could place additional pressure on existing production capacity.

■ **Inventories:** Still no problem here. The all-business stock/sales ratio is projected to be lower in 1988 than it was in 1987. But as 1989 unfolds and demand grows more slowly, figure on this ratio rising a bit. Still, it should remain under last year's average.

■ **Consumer spending:** While not over-aggressive, the typical U.S. spending unit has not gone into hibernation as some had feared. Consumer confidence measures have been rising in recent months, and consumer spending managed to rise at a 4.3% annual rate in the first quarter. For the year as a whole, a 2.5% increase is seen—above the 2% rate projected at the beginning of the year.

■ **Profits:** Faster GNP growth will

Illustration by Andy Shive

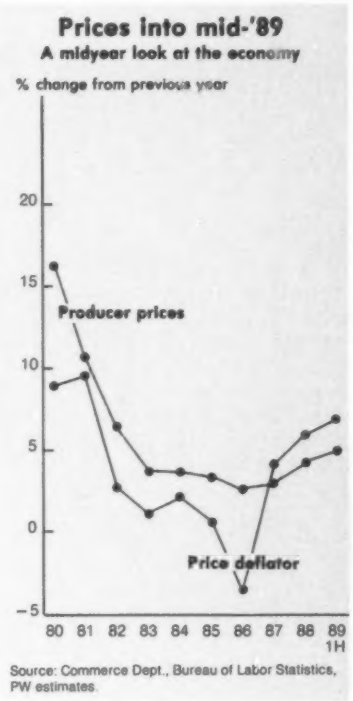
be helpful, along with the larger price increases now envisioned. But modest productivity gains and larger wage hikes will mean higher unit labor costs. Upshot: Look for a narrowing of profit margins. Indeed, recent reports in *Investors Daily* already suggest some softening in earnings.

■ **Trade deficit:** The sizable turnaround this year has been a surprise to many. The weaker dollar, better productivity, and more rapid growth in foreign demand have all played a part in increasing our exports and slowing down import gains. Further improvement is expected in 1989.

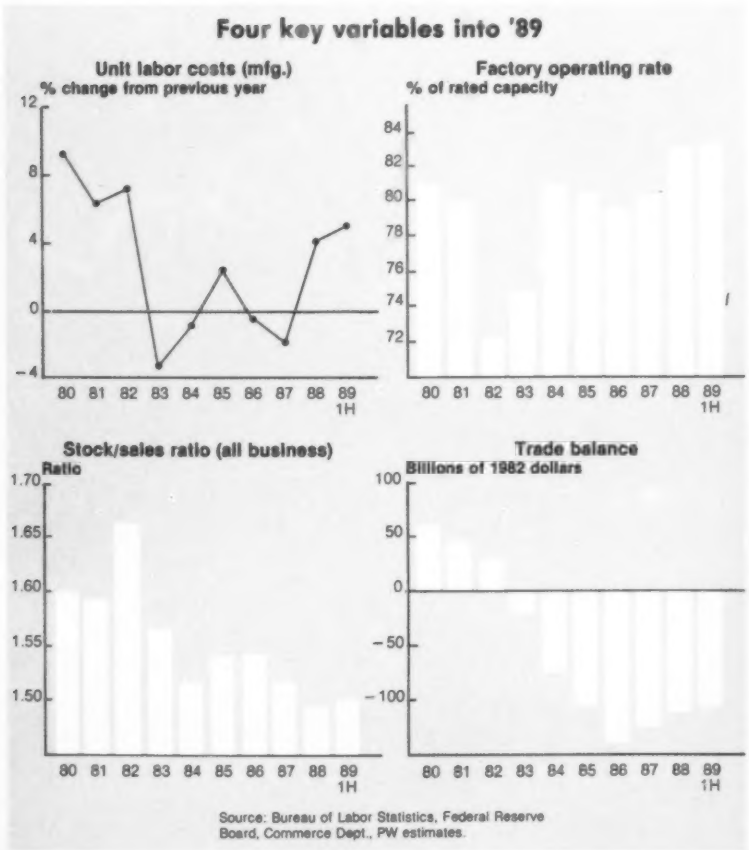
As of now, the 1988 trade deficit in 1982 dollars should drop down to $135 billion (*versus* $146 and $135 billion in 1986 and 1987, respectively). And for early 1989, a further drop-off to $110 billion is seen.

■ **Exchange rates:** The dollar has come down in 1988 but at a much slower pace than in 1987. Indeed, since April the value of the dollar has been about flat—and the dollar futures index (an indicator of where the smart money sees the dollar going) has a slight upward tilt.

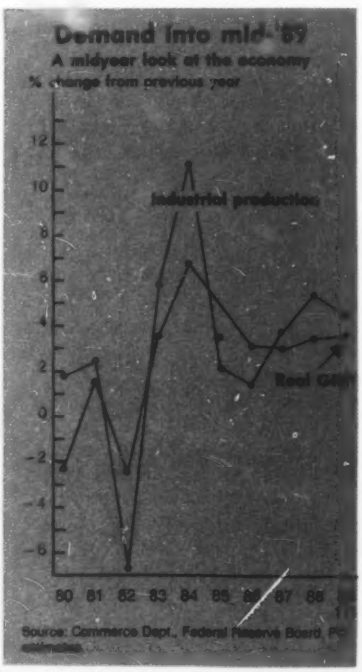
Despite this index tilt, inflation is picking up in the U.S. and the Federal budget deficit shows no early signs of improvement. So all in all, not much change is expected in the value of the dollar between mid-1988 and mid-1989. ***PW***



Source: Commerce Dept., Bureau of Labor Statistics, PW estimates.



Source: Bureau of Labor Statistics, Federal Reserve Board, Commerce Dept., PW estimates.



Source: Commerce Dept., Federal Reserve Board, PW estimates.

A SECOND LOOK AT 1988

Durables up, non-durables down

Top corporate executives in the United States are making some mid-course corrections in their original 1988 business projections.

While real demand gains in manufacturing aren't expected to change much (4.5% is the latest overall estimated increase), durables will do better than anticipated—and nondurables worse. On the price front, forecasted 1988 increases are generally higher than they were at the beginning of the year.

The new numbers, part of McGraw-Hill's latest plant and equipment survey, suggest that management is increasing its capital spending plans. And there's a good reason too. A growing number of industries are approaching or exceeding their preferred operating rate levels.

Some of the new study's more specific findings:

- **Durable goods demand:** The average increase in real terms is forecast at 6.3%—far above the beginning-of-the-year 3.0% estimate. This is traceable to capital goods with nonelectrical machinery sales gains now put in the double-digit 10.4% range; more than double the earlier 4.5% estimated advance.

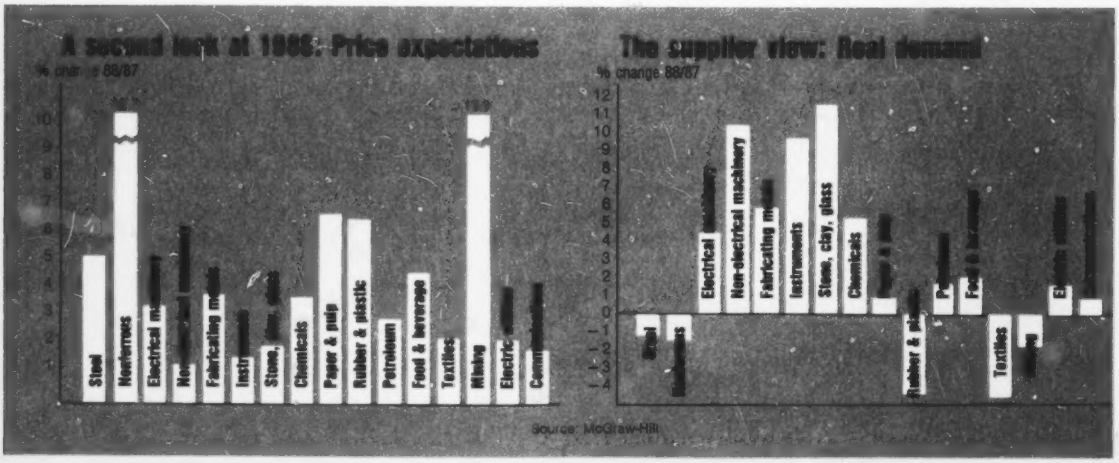
Another strong performer is instruments, where a 9.6% real advance is seen for 1988. Also steel's projected shipment losses have been pared from 5.7% in January to 1.1% currently.

- **Nondurable goods demand:** A substantially reduced average gain is projected—2.3% now *versus* 5.8% six months ago. Only chemicals (up 5.1% in real terms) will do better than originally anticipated. Paper and pulp gains are put at 0.8% currently (*versus* 2.6% earlier). And textile manufacturers are bracing for a 4.7% decline, in sharp contrast to earlier predictions for a 3.6% gain.
- **Durable goods prices:** The average 1988 advance is put at 3.7% (up from the previous 2.4% estimate). Biggest upward revisions are noted for steel and nonferrous metals where 5.0% and 12.7% advances, respectively, are predicted.
- **Nondurable goods prices:** Some upward adjustments are noted here with the average gain now around 4.5% (*versus* 3.0% previously). Every single subsector is being raised here. The biggest gains are seen for paper (6.6%) and rubber and plastics (6.5%).
- **Nonmanufacturing prices:** Mining, reflecting the metals pinch, has been revised (to a 13.8% increase). But inflation rates for the electric utilities and communications sectors remain modest at 2.0% and 1.5%,
- **Capital spending:** The overall 1988 revision is really significant. The nation's decision makers are predicting a 9.9% dollar advance—above the 6.2% increase projected six months ago.

Zero in on manufacturing and the upward revision is even steeper. An earlier 8.8% estimated increase in plant and equipment outlays gives way to a 13.2% gain. Even after allowing for an estimated 4.5% increase in plant and equipment purchase prices, that still suggests an 8.5% real advance.

The biggest capital spending increases are in areas where demand is currently bumping up against capacity. Hence these eye-opening 1988 plant and equipment spending gains: Iron and steel (29.0%), chemicals (19.5%), and paper and pulp (30.5%).

Another encouraging sign: Preliminary 1989 spending plans are pretty much on par with 1988 estimates. Finalization of some plans, now in the talking stage, is sure to inflate this figure. Production is now rising faster than expected. Upshot: Another 5-10% capital spending gain for 1989 now seems like a good bet. ***PW***



Industrial growth to outpace GNP's

The nation's top econometric forecasting models are still bullish on America. Their basic projections into 1989: 1) A continuation of the longest peacetime boom in history and 2) relatively modest price acceleration—certainly nothing to suggest any new inflationary spiral.

The price figures are encouraging since they take into account the basic upward-tugging forces of high operating rates, brisk demand, increasing exports, and the recent run-up in some basic materials.

But even with all these plugged into the forecasting equations, the readings are quite reassuring. Finished producer prices are expected to advance only 2.4% in 1988. All three of the models surveyed for this report (see table) basically agreed on this estimate.

And while some speedup is seen for the following year, the overall 1989 increase in this bellwether is just a bit above 4.5%.

Less acceleration is seen for the all-inclusive GNP price deflator and the cost-of-living index. Both are targeted to accelerate only 1% in 1989.

Wages hold down prices

According to a spokesman for one of these firms, much of the price restraint reflects basically modest labor cost pressure. His company feels wages for non-farm production workers will rise only 3.0% in 1988 and 4.2% in 1989—not that earthshaking when considering that 1-2% of this could be offset by productivity gains.

As for demand, the three models agree on a 3% increase in real GNP growth in 1988 almost 1% above what they were projecting six months ago (*PW*, 1/88, p. 37). And while the projected average increase drops to 2.2% in 1989 that's also better than earlier-in-the-year estimates.

Equally significant, industrial production will probably outpace GNP by 1% in both 1988 and 1989. Reason: Some of the biggest demand gains are expected to be in machinery and other goods-producing industries.

This, in turn, is expected to keep unemployment rates low. Next year's consensus here: A 5.7% rate—only fractionally above the 5.6% reading projected for the current 12-month period.

That's not to say, of course, that there won't be problems. Higher interest rates will have to be watched closely. The 3-model average calls for a 9.5% prime rate in 1989, up more than a half a percentage point from the 8.8% average envisioned for the current year.

There's very little variation among the three models as far as price increases are concerned. And the same is true of growth, unemployment and interest rates. Since all of the models are independent of each other, it suggests that the basic determinants of the economy are still fundamentally strong.

And the same seems to hold true for 1990 (not shown in table). DRI and Wharton see real GNP advancing 2.6% and 1.9%, respectively.

There's still nothing on the horizon (based on the time-tested mathematical relationships that underlie these econometric models) to indicate that the long business uptrend is about to end anytime soon. ***PW***

What the Econometric Models see ahead

Real GNP (% change)	1988	1989
DRI	2.8	2.8
Wharton	3.0	2.3
Merrill Lynch	3.2	1.6
Average	**3.0**	**2.2**
Industrial production (% change)		
DRI	4.2	3.4
Wharton	4.7	3.1
Merrill Lynch	5.0	2.6
Average	**4.6**	**3.0**
GNP price deflator (% change)		
DRI	2.9	3.7
Wharton	3.1	4.2
Merrill Lynch	3.3	4.7
Average	**3.1**	**4.2**
Finished producer prices (% change)		
DRI	2.3	4.7
Wharton	2.4	4.2
Merrill Lynch	2.6	4.9
Average	**2.4**	**4.6**
Consumer prices (% change)		
DRI	4.0	4.6
Wharton	3.9	5.0
Merrill Lynch	4.2	5.1
Average	**4.0**	**4.9**
Prime interest rate (%)		
DRI	8.6	9.2
Wharton	8.9	10.2
Merrill Lynch	9.0	9.2
Average	**8.8**	**9.5**
Unemployment rate (%)		
DRI	5.7	5.6
Wharton	5.6	5.8
Merrill Lynch	5.4	5.6
Average	**5.6**	**5.7**

What do you see for 1988?

What's your forecast on how the U. S. economy will fare in 1988? Your opinion is as valuable, and possibly more accurate, than the predictions of most economists.

To see if you're a champion forecaster, enter *Purchasing-World* magazine's 1988 Crystal Ball Contest. Deadline for entries is July 31st. The Top 100 prognosticators will be nationally publicized in *PW*'s March issue. Just use the entry blank on page 51 of this issue.

A SECOND LOOK AT 1988

Buyers' midyear projections improve

The nation's industrial purchasing executives continue to view the economy through rose-colored glasses.

On the demand front, they say that things have actually improved—1988 gains are now expected to top estimates made six months ago. And while prices are expected to rise faster than anticipated at the beginning of the year, the rates of increase are still tolerable.

A new *PurchasingWorld* magazine survey suggests that the average procurement bill will go up 5.0% this year—only about 1% more than envisioned by the same respondents in January. Equally important, less than one out of five sees the increase reaching or topping 7%.

Second half revving up

As for demand, these same *PW* respondents say their own firm's activity will increase 5.7% on average this year—fractionally more than their 5.4% earlier estimate. More significant, those anticipating second half acceleration outnumber those expecting deceleration by an impressive 3:1 margin.

A special midyear NAPM Business Survey Committee report paints a similar price and demand picture. True, the estimated 5.8% price increase projected by the NAPM for the current year is slightly higher than that envisioned by *PW* readers. But the fact that 3.8% of this advance has already been posted suggests that the worst may be over.

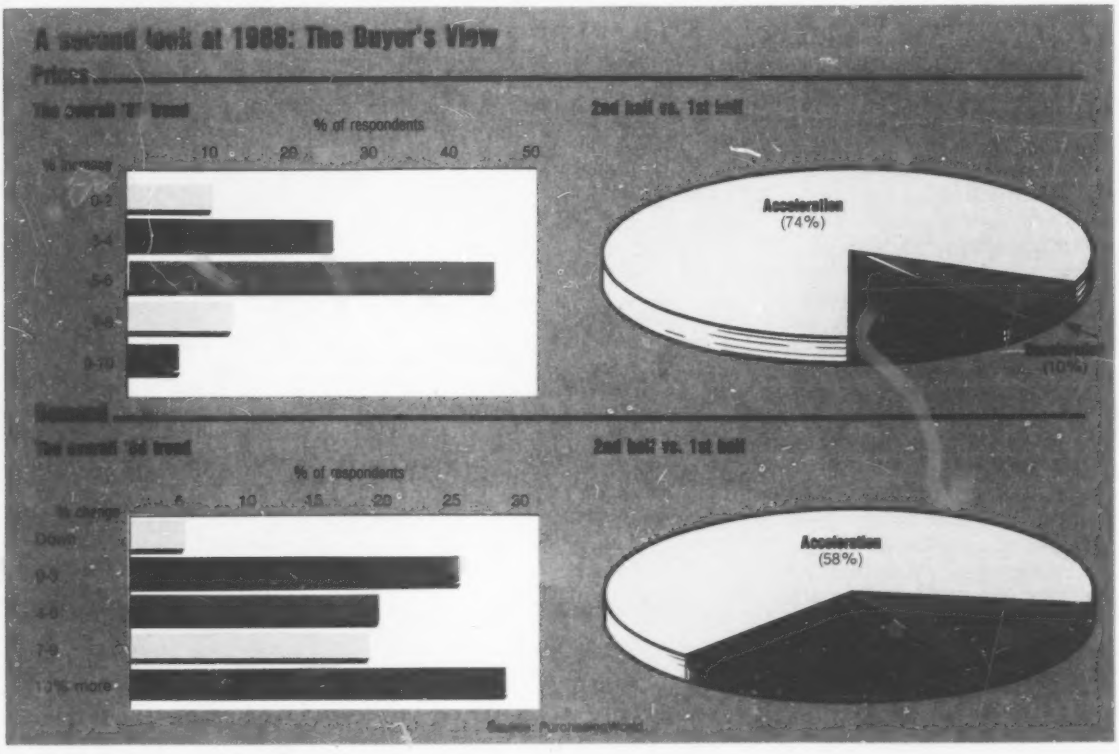
Selective/moderate increases

Moderation is also indicated by the fact that most of the upcoming NAPM survey increases are expected to be 1) selective rather than across the board and 2) moderate or slight rather than severe.

And while the NAPM doesn't give a specific demand estimate, the fact that seven out of every eight respondents say 1988 will be better than 1987 has to be reassuring.

The *PW* survey indicates that inventories will stay slim. Despite continuing business gains, the number of survey respondents expecting to add to stocks is pretty much balanced out by those anticipating cutbacks.

Comments suggest several factors may be behind this continuing "keep 'em lean" strategy. First and foremost is better inventory control, with an added assist coming from just-in-time stocking. Other factors mentioned: High carrying costs and difficulty laying in extra supplies of



items like steel, plastic resins and electronic parts.

"Hard to get" list grows

Other products said to be hard to get these days include off-road tires, polyester, nylon, bearings, aluminum, nickel, refrigeration compressors, printing paper, corrugated, heavy construction equipment, titanium dioxide, and caustic soda.

Such tightness could be one reason why these same *PW* readers expect leadtimes to continue to stretch. Fifty-three percent are looking for further stretchouts *versus* only 10% who expect some shrinkage.

Still further confirmation of supply problems comes from replies to a question posed by the NAPM Business Survey Committee on factory operating rates. At latest report, 58% said their companies were operating at 90% or better capacity. That's up significantly from the 45% and 50% figures of a year ago and this past January, respectively.

But some relief could be on the way. Replies to another NAPM question indicate that 53% see increases in their firm's capital outlays this year. That's better than a 10% increase from the beginning-of-the-year 42% reading.

Imports growth continues

One surprising NAPM finding: Imports are expected to continue rising, despite the softer dollar which has raised U.S. landed costs. Over the next six months, for example, 28% of the responding companies are planning on increases *versus* only 21% who will be reducing their import purchases.

While the report doesn't give reasons for this, several are suggested: 1) lack of alternate domestic sources, 2) shifting over to countries where the dollar has managed to hold up, and 3) long-term commitments with foreign suppliers. ***PW***

NAPM survey revises seasonal factors

Sudden swings in price, production, delivery performance, and inventory levels can be—and often are—misleading. To a large extent they may be just temporary aberrations, due more to seasonal variation than to any shift in the underlying procurement climate.

Uncle Sam knows this--witness the fact that most business statistics are now seasonally adjusted. And so does the NAPM Business Survey Committee, which has just revised its "seasonal adjustment" factors for all of its monthly series.

According to Robert J. Bretz, committee chairman and director of materials management for Pitney Bowes, "Price increases seem to be most prevalent at the beginning of the year. And late winter/early spring seems to mark the peak time for production gains, delivery slowdown, and inventory bulges."

Here's a detailed look at these seasonal adjustment factors as prepared for the NAPM by the U.S. Commerce Department:

Prices: The number of PMs reporting increases is usually highest in April (nearly 5% more than for the year as a whole)—and lowest in August (nearly 5% less than for the year as a whole).

Production: The number of buyers noting increases tends to reach its zenith in the February-April period (8-9% above normal) and its low point in July (nearly 11% under average).

Vendor deliveries: The largest number of slowdowns is likely to occur in March (about 5% more than the yearly norm)—with the smallest number of slowdowns (3% less than average) coming in August.

Inventories: The number of PMs adding to stocks is likely to reach its high point in February (nearly 9% more than for the year—probably in preparation for late winter production gains). On the other hand, the low point is hit in November when nearly 10% fewer than normal are usually adding to their holdings.

These seasonal adjustment factors are all summarized in the accompanying charts. Observes Bretz, "Apply these numbers to NAPM Business Survey Committee results—and you end up with a much more meaningful picture of basic business trends." ***PW***

Seasonal adjustment factors (1.00 equals yearly norm)

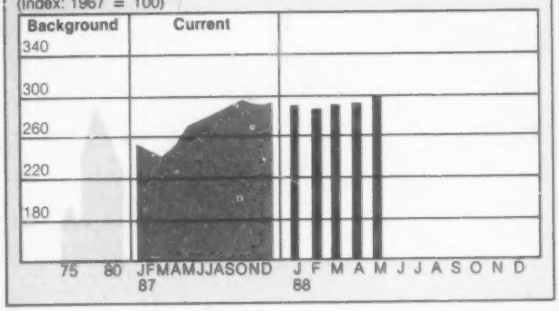
	Price increases	Production increases	Vendor delivery slowdowns	Inventory increases
JAN	1.036	1.061	1.006	1.012
FEB	.995	1.085	1.003	1.087
MAR	1.026	1.091	1.040	1.240
APR	1.048	1.081	1.001	1.049
MAY	.994	1.019	1.000	1.021
JUN	.995	.975	.970	.989
JULY	.992	.893	.891	.845
AUG	.953	.962	.972	1.028
SEPT	.990	1.018	1.003	.919
OCT	.997	.970	.998	.962
NOV	.982	.962	.989	.918
DEC	.994	.889	.991	.925

Source: National Association of Purchasing Management

Raw material price barometer

Latest month 301.4
Month before 297.3
Year ago 272.6

(Index: 1967 = 100)



LATEST SPOT MARKET PRICES

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	367.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	23.90	23.90	23.90
Steel, bars, dlvd. Phila., cwt., merchant quality	16.50	16.50	16.50
Steel, bars, Pitts., cwt.	16.50	16.50	16.50
Steel, bars, C.R., Pitts., cwt.	19.45	19.45	19.45
Steel, plates, Pitts., cwt.	19.75	19.75	18.25
Steel, plates, H.R., Pitts., cwt.	19.75	19.75	18.25
Steel, sheets, C.R., Detroit, cwt.	28.15	28.15	26.90
Steel, strip, C.R., Chi., cwt.	36.18	36.18	36.18
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	1.26	1.08	.70
Antimony, N.Y., dealer, lb.	0.98	1.08	1.18
Beryllium-copper, cost ingot, lb.	5.90	5.90	5.65
Brass, red, 85%, [sheet], lb.	1.80	1.66	1.37
Brass, yellow, [sheet], lb.	1.75	1.61	1.32
Cadmium, N.Y., dealer, lb.	8.00	7.90	1.60
Copper, electrolytic, wire bars, refd., lb.	1.16	1.02	.73
Copper sheet, over 24 in., lb.	1.88	1.74	1.46
Lead, common, N.Y., lb.	.36	.34	.35
Magnesium, pig ingot, [99.8%], lb.	1.58	1.53	1.53
Mercury, 20 fl. lots, N.Y., fl.	355.00	345.00	310.00
Molybdenum, oxide, dealer, lb.	3.50	3.58	2.58
Nickel, cathode, dealer, lb.	7.05	7.95	2.17
Platinum, dealer, oz.	567.00	517.00	582.00
Silver, N.Y., oz.	7.01	6.37	7.82
Tin, N.Y., dealer, lb.	3.31	3.21	3.20
Zinc, Prime West, East St. Louis, lb.	.63	.57	.45
Zinc, die casting alloy, No. 3, lb.	.675	.615	.495
PAPER			
Uncoated book #3 offset, ton	920.00	920.00	860.00
Watermarked bond, ton	1070.00	1070.00	985.00
Gummed sealing tape, carton	17.57	17.33	16.68
Grocery sacks, ton	455.00	455.00	390.00
Solid bleached paperboard, ton	685.00	685.00	620.00
Kraft linerboard, 42 lb., unbleached, ton	410.00	410.00	350.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	.285	.283	.240
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.22	1.22	1.22
Cotton middling, 1", N.Y., lb.	.644	.604	.682
Printcloth, 48", 80x80, N.Y., spot, yd.	.510	.540	.650
Army duck, 37", 13 oz., yd.	1.510	1.510	1.445
Blended printcloth, 64", 78x54, yd.	.64	.66	.94
20s combed yarns	2.00	2.00	1.88
Wool 64s, Staple, lb.	4.50	4.50	2.70

	Latest price	Previous month	Year ago
CHEMICALS			
Acrylonitrile, tanks, lb.	.395	.395	.395
Ammonia, anhydrous, tankcars, Gulf Coast, ton	100.00	100.00	105.00
Benzene, petroleum, tanks, Houston, gal.	1.05	1.03	2.50
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	.55	.58	.58
Formaldehyde, USP, 37%, [12% to 15% meth.], tanks, lb.	.106	.106	.106
Glycerine, synthetic, tanks, lb.	.685	.685	.910
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	.55	.53	.28
Naphthalene, crude, tanks, lb.	.22	.22	.22
Phthalic anhydride, tanks, lb.	.34	.34	.27
Polyethylene resin, low density liner film grade (market place), lb.	.465	.465	.315
Polypropylene, homopolymer grade (market price), lb.	.515	.515	.390
Polystyrene, general purpose grade (market price), lb.	.590	.580	.470
Polyvinyl chloride, pipe grade (market price), lb.	.420	.400	.325
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	.45	.45	.52
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	127.50	127.50	134.50
Sulphuric acid, 66%, commercial, tanks, ton	66.86	66.86	66.86
Titanium dioxide, anatase, reg., carlots lb.	.87	.87	.77
Xylene tanks, gal.	.87	.87	.85
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	329.30	327.05	329.30
Lumber 2x2 pine, mbf, cl	326.15	327.15	324.65
Plywood, plyform, ¾", msf, cl	578.70	579.35	580.75
Plywood, ⅜", msf, cl	413.45	414.45	384.15
Cement, bulk, ton, tl	65.02	65.01	64.35
Sand, ton, cl	7.32	7.32	7.21
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd.	49.10	49.46	49.08
Crushed stone, 1½", ton, cl	8.50	8.47	8.29
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.93	0.93	0.90
Gypsum sheathing, ½"x1"x8", msf, tl	228.43	228.43	227.00
Brick, common, per thousand, tl	204.91	204.91	192.82
Asphalt paving, AC-20	128.37	129.30	127.31
Concrete sewer pipe, 12", prem. joint, per foot, cl	7.58	7.58	7.15
FUELS			
Crude oil (W. Tex Int Cush), bbl.	16.45	17.50	20.05
Diesel (reseller rack, Chi), gal.	.4625	.5050	N.A.
Fuel oil No. 2 (N.Y.), gal.	.4425	.5150	.5275
Fuel oil No. 2 (Gulf spot), gal.	.4150	.4650	N.A.
Fuel oil No. 6 (N.Y.) contract cargo, bbl.	16.00	16.50	N.A.
Gasoline (reg lded NY), gal.	.5200	.5410	.5775
Gasoline (reg unided NY), gal.	.4975	.5285	.5635
Kerosene (reseller rack, Chi), gal.	.5050	.5540	N.A.
Propane (Mt. Belviu, Tex), gal.	.2325	.2450	.2400
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	104.00	108.00	83.00
Steel, No. 1 hvy., dlvd., Chi., ton	108.00	111.00	76.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	.970	.890	.650
Copper, No. 2, East, wholesale buy, dlvd., lb.	.880	.795	.565
Brass, red, East, wholesale buy, dlvd., lb.	.930	.850	.610
Brass, yellow, East, wholesale buy, dlvd., lb.	.425	.425	.345
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	.680	.620	.435
Alum., mixed clip., E., wholesale buy, dlvd., lb.	.750	.705	.475
Zinc, old, East, wholesale buy, dlvd., lb.	.240	.240	.200
Lead, clean solids, East, wholesale buy, dlvd., lb.	.220	.210	.230
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	15.00	20.00	45.00
Paper, old corrug. box, dlr., N.Y., ton	5.00	5.00	25.00
Old newspapers, Chi., ton	15.00	15.00	N.A.
Old white ledger, Chi., ton	75.00	75.00	N.A.

[Sources: Metals Week, American Metal Market, Engineering News-Record (20-city averages), Wall Street Journal, Journal of Commerce, Chemical Marketing Reporter.]